



(U//FOUO) 'Can You See Me Now?' - GPS Enabled Technologies

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(U//FOUO) Almost everyone is familiar with the cell phone catch phrase, "Can you hear me now?" The next era, "Can you see me now?", has arrived. Numerous devices using Global Positioning Systems (GPS) for determining their location have proliferated across every part of society. These devices are not only able to transmit their location information, but also receive location information from similar devices. Imagine being able to see where all of your buddies are located when planning a lunch. You could overlay the locations of Chinese restaurants in the area, select the best or closest one, and send that location to your buddies. Well, that time is already here.

(U//FOUO) GPS-based systems, and similar technologies, enable us to know many things such as:

- where am I;
- where are my buddies;
- where is my car;
- where is my boat;
- where are other boats in my area.

(U//FOUO) Obviously, these are just a few examples, and the amount of information from these types of devices has exploded recently, resulting in an "Information Tsunami." This huge wave of information is only going to grow larger. As costs of Global Positioning Systems become more affordable, these devices will be integrated into our daily life and become an increasingly invisible service that we come to rely on for even the simplest of tasks.

(S//SI) One of the first examples of the global use of this type of technology is the ITU-R M.1371-1 recommendation jointly developed by the International Telecommunication Union (ITU) and International Maritime Organization (IMO) and known in the public domain as Automatic Identification System (AIS). AIS is a standard that governs the means for transmitting and receiving information on a ship's position, course, speed, name, type of cargo, size, destination, etc. It also provides a framework for extending the basic capability to include TELEX messages, ship way points, and gives vendors the capability to provide proprietary services to ships outfitted with its equipment.

(S//SI) AIS-derived SIGINT is already available to the SIGINT production chain, with dissemination limited under interim OGC (Office of the General Counsel) guidance. Although significant legal and policy hurdles remain, SIGINT exploitation of AIS is already a success in terms of grappling with widespread self-disclosure technologies. Exploitation of AIS exemplifies how NSA, as a Combat Support Agency, can help assure information superiority by providing precise and timely geositions far beyond the range of most tactical sensors -- allowing not only enhanced Force Protection but also setting the stage for automated correlation of unidentified commercial radar intercepts to specific vessels.

(S//SI) And this is just the beginning. NSA's Joint PROFORMA Center (JPC) is the Executive Agent for developing these new technologies. The JPC is responsible for the technical analysis, oversight of the processor architecture, coordination of data dissemination, and is the Intelligence Community's SIGINT focal point for these systems. JPC will help provide an unprecedented level of detailed information on the location and movements of high value assets including people, ships, cargo, etc. for support in the global war on terrorism and support to military operations worldwide. For more detailed information please contact the [Joint PROFORMA](#)

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